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Testimony of Andrew K. Golden, CFA President of the Princeton University Investment Company presented to the Financial Services Committee United States House of Representatives March 13, 2007

Chairman Frank, Ranking Member Bachus, and Members of the Committee, thank you for the opportunity to share my perspective on "Hedge Funds and Systemic Risk in the Financial Markets." I speak as someone who has been active as an institutional investor in hedge funds for almost two decades.

For the past twelve years I have been the President of the Princeton University Investment Company (known as "PRINCO"), a University office with responsibility for investing Princeton's \$14.2 billion Endowment. Previously, I worked in the investment arms of Duke University, and Yale University. At all three schools, I was involved in the development and maintenance of hedge fund investment programs. At all three schools these programs comprised a substantial share of assets and were integral to the strong investment performance of the respective endowments.

As PRINCO's president I oversee a staff consisting of 13 investment professionals who develop asset allocation plans, select and monitor a roster of 140+ external managers, and co-ordinate asset deployment across that roster. (I should underscore that all of Princeton's investing in every asset class is done via outside specialist managers. PRINCO acts essentially as a large fund-of-funds manager.) In addition to the investment team, PRINCO has 11 more staff who provide administrative, technical, and operations support. (Additional back-office support is provided by several members of the University Treasurer's Office.) Staff operates under the oversight of a 12 member Board of Directors, composed primarily of alumni investment experts, many of whom also serve as University Trustees.

The bulk of my comments today will relate to describing the role of hedge funds in Princeton's investment strategy and our approach to making hedge fund investments. While I like to believe that we are particularly good at executing our approach, my sense is that it is broadly similar to that employed by a number of other sophisticated institutions. Thus, I think Princeton's hedge fund program can be illustrative of a substantial cohort of hedge fund investors. I hope it will be apparent that for sensible, sophisticated investors, hedge fund investments need not entail great risk. Indeed, hedge funds can be important tools for reducing risk.

After discussing Princeton's hedge fund investment approach, I will respond to some other questions that Chairman Frank asked me to cover.

Princeton has enjoyed success as an investor. For example, the annualized investment return of Princeton's Endowment during the past ten fiscal years (ending June 30, 2006) was 15.7%. During the same period, the median annualized investment return among the 477 schools surveyed by NACUBO (The National Association of College and University Business Officers) was 8.7%, similar to the 8.3% gain of the S&P500. During my tenure we have never had a year of negative investment performance, even during the post-bubble bear market, suggesting that our substantial investment gains reflect something more than merely the taking on of high levels of risk.

Princeton has enjoyed particular success as an investor in hedge funds. But before going any further, let me say that all my comments today are complicated by the fact that "hedge funds" do not represent a distinctive investment category. They are not an asset class, as are investments such as U.S. stocks, real estate and venture capital, where the members of the set share inherent qualities that cause them to perform in broadly similar fashion. Rather, hedge funds are a relationship format, defined by the nature of the contractual arrangement between an investment manager and his or her clients. The key features of hedge fund contracts are: 1) a partnership structure with limited liability for at least some of the partners (the clients); 2) a commitment by the investment manager to put at least some amount of personal assets in the partnership to be invested alongside the clients' assets; and 3) a fee schedule that includes an incentive fee, meaning that the manager receives a share of the profits generated by the clients' money. (It is common practice to also distinguish hedge funds from other private investment partnerships by using the term only to refer to partnerships that invest mainly, although not necessarily exclusively, in relatively liquid holdings. Thus, hedge funds are distinguished from venture capital, buyout, real estate and other similar partnerships.) The hedge fund structure can be used in the pursuit of a very broad variety of strategies across a spectrum of market sectors.

At Princeton, the hedge fund structure is prevalent throughout our portfolio. Roughly 45% of the Endowment is invested via the hedge fund format. However, included in this number is the roughly 15% of the Endowment that is invested in 14 funds that pursue traditional, long-only investment strategies, with typically just \$1, or slightly less, of market exposure for every \$1 we have invested. In terms of opportunity and risk exposures, these funds tend to walk and quack like mutual funds or traditional institutional investment accounts, albeit ones that are managed very, very well, with superior track records.

The hedge fund format entails a higher fee schedule than that of traditional institutional investment accounts. So why do we take an approach that is seemingly more expensive to gain exposure to plain-vanilla investment strategies? We do it because the hedge fund format better aligns the managers' interests with our own. The reduction of agency

(small "a," as in principal vs. agent, not Government Agency) costs creates a fertile environment for superior *net* returns.

In the hedge fund format, the manager has strong incentive to strive for excellence, and to take contrarian positions if they offer attractive prospects. Importantly, the manager can gain extraordinary personal wealth if our portfolio performs well. This phenomenon is in contrast with traditional fee schedules where in order to increase income, the manager has to continuously increase assets, probably beyond the point where assets become greater than the most attractive opportunity set. The hedge fund manager can become fabulously rich while limiting assets to an appropriate size.

The hedge fund relationship format, at least as practiced by Princeton and other savvy clients, dis-incentivizes managers from taking inappropriate risks. All of our managers have a significant share, typically the vast majority, of their personal net worth invested side-by-side with us. Thus, if they make a bet that has an unfortunate outcome, the manager will certainly "feel our pain."

Of course, aligned interests do not guarantee superior performance. Our decision to invest in any hedge fund presumes that the manager can add value greater than the fees we are paying. If we misjudge in this regard, our decision will have been "sub-optimal." But this is true for any decision to engage in active management, whether the relationship format is a hedge fund, a mutual fund, a classic institutional management account, or a retail brokerage account.

Approximately 30% of the Endowment is invested in 16 hedge funds that do pursue lesstraditional strategies. We categorize these hedge funds as "Independent Return" managers. These managers focus on areas where market inefficiencies are of such magnitude that the managers have hopes of creating equity-level returns with risk levels no worse than traditional equity investments. For insight into the risk levels assumed by our managers, I turn to one imperfect, but nonetheless illustrative ex post measure of risk—annualized standard deviation of monthly returns. Our Independent Return managers in aggregate have displayed risk levels (standard deviation = 7%) that are more similar to fixed income (4%) than to equities (13%). Importantly, our managers' returns are driven largely by idiosyncratic factors, and therefore their performance has low correlation with broad market moves in most environments. This low correlation means that our Independent Return program has been particularly effective at reducing the Endowment's total risk. Indeed, the Independent Return portfolio has had a stabilizing impact on the Endowment's performance during every market downdraft during my tenure at Princeton. (This phenomenon does reflect luck. Low correlation is different from negative correlations. It should be expected that there will be times when the Independent Return program will move similarly to the broad market, and thus the program could exacerbate, rather than mitigate, losses in other parts of the Endowment.)

Our Independent Return managers can be loosely divided into two similar sized groups. The first comprise stock-picking managers who have the license and expertise to sell short as well as invest long. The second group pursues arbitrage and event-driven strategies, such as investing in the securities of bankrupt companies, where the outcome of the investment depends upon the outcomes of unique events.

We do not invest with managers pursuing inherently opaque strategies or ones where we cannot understand how the manager can gain an "edge." Thus, we do not invest with global-macro punters or black-box traders. Our managers do not employ significant leverage. Our independent return managers in aggregate have net market exposure of 40% equity and 45% fixed income. Gross exposure (summing the absolute values of all long and short positions) is 166%. The exposures to which I am referring reflect market values, and are not adjusted for differences in the inherent risk (or *beta*) of positions. Nonetheless, the figures should give a good general sense that our Independent Return program is "low-octane." The leverage figures are representative of typical exposure, although they are perhaps somewhat below historical averages.

We hope for slow and relatively steady success in our Independent Return program. We have never been attracted to hedge funds that have track records of extraordinarily high returns. We are suspicious that such returns can be achieved without the assumption of excessive risk. Several years ago, we in fact withdrew the bulk of our investment in a hedge fund that had just produced an 80% gain in one year. We did this in part because of concerns that the manager's risk profile had become too aggressive. The manager's results subsequently supported our hypothesis.

Our low-octane approach has nonetheless generated strong performance. The ten-year annualized return to our Independent Return program is 16.4%.

Our success in Hedge Fund investing has been the result of several factors. We have some natural advantages as an investor. Princeton's and PRINCO's reputations make us a desirable client, so we at times get access to managers that turn other clients away in order to limit assets to optimal size. Our intelligence networks are strengthened by the inclusion of devoted alumni. We have a naturally long investment horizon and low liquidity needs, making the range of investment strategies that are appropriate for us very broad. Our assets are of "goldilocks" size—small enough so that choice, small-scale opportunities can have meaningful impact on our bottom-line, yet big enough to cost-effectively support necessary due diligence and monitoring activity.

Indeed, the exhaustive level of due diligence we perform before hiring a manager, and the extensive efforts we make in monitoring and working with the manager after the hire, are probably the second most important factors behind our Hedge Fund investing success. (I will reveal the most important factor in a moment.) We spend at least 400 person-hours in our due diligence process before investing in a hedge fund. Several managers have noted similarities between our due diligence process and a medical exam. The process

involves several meetings with the manager including at least one in the manager's office. We spend considerable time going through portfolios and individual positions. We look through randomly selected investment files of the manager in order to get a better sense of analytic approaches, and importantly to see if there is evidence that the manager has considered down-side possibilities. We check dozens of references, using our networks to go beyond the references provided by the manager. (Included in our reference checks are the management of portfolio companies. Through these references, we get a sense of the depth of the hedge fund manager's understanding of his or her investments, and also insight into the appropriateness of the manager's methods.) Not all of our due diligence is exciting—we do spend time looking at the manager's operations to assure that there are no weaknesses.

A lot of our due diligence focuses on getting clarity on the character and motivations of the manager. This is vital, because it is impossible to contract good behavior.

The intensity of our examination of the manager does not let up after the hire. We average approximately 70 person-hours per year monitoring each of our hedge funds. After investing in a hedge fund, we continue to meet with the manager in his or her office, and even continue to occasionally check references.

The extensiveness of our due diligence and monitoring has been critical to our success. However, the single most important success factor has been that we are always guided by a simple, over-arching rule—we will not invest in something we don't understand.

I believe the quality of our due diligence is distinctive, but not unique. I believe that a substantial number of other hedge fund investors perform prudent levels of due diligence, but many do not. However, I do not think this phenomenon is limited to investors in hedge funds. In all areas of investment, there are investors who fail to perform adequate due diligence.

The markets for client money, particularly institutional client money, do provide a small amount of discipline with regard to whether a particular hedge fund manager will flourish. That is to say that managers lacking sensible approaches and well-developed operations are less likely to be able to raise large funds. But the market discipline is relatively small, as evidenced by Amaranth. That said, I am not sure that there is any danger, certainly any systemic risk, from the fact that client market discipline is somewhat weak. It should be noted that financial, commodity and derivative markets absorbed the blow-up and aftermath of Amaranth in a very orderly fashion.

It is also worth noting that with the growth of the hedge fund industry, it is becoming ever more common for hedge funds to be on the opposite side of each other's trades. In this way hedge funds are providing their own market discipline to limit systemic risk. In other words, hedge funds do not act monolithically as a group. They provide liquidity for each other and therefore are likely helping create more orderly markets.

The description of our intensive due diligence process should make clear that the hedge funds we invest in provide us with adequate transparency. We require such transparency, but not all managers are willing to give it. In these cases we are perfectly comfortable walking away. There have been instances where hedge funds that we chose not to invest with because of insufficient transparency have gone on to produce fantastic results. I have no regrets regarding these decisions.

As to whether other investors are able to get adequate transparency, the answer would seem tautologically "yes," because no investor has ever been forced to invest in any particular hedge fund. If someone is investing in a hedge fund, they must feel that they have adequate information to make that decision. I say this because hedge funds, as opposed to mutual funds, are meant for sophisticated investors. The investors' sophistication should include an ability to decide whether or not the investor has sufficient information to prudently make decisions regarding initial and continuing investment in a particular fund. I do not believe that sophisticated investors who willingly invest in any thing, hedge fund or otherwise, without satisfying themselves that they have adequate information deserve any sympathy, let alone additional regulatory safeguards.

Transparency refers to the availability of information. A separate issue, of course is whether the investor has the capability and time to process that information. If the answer is "no," then the investor would be investing in violation of the basic common sense rule I previously articulated: "Don't invest in something you don't understand." Again, I don't believe that violators of this rule deserve sympathy or additional regulatory support. Indeed, I believe that fiduciaries who violate this rule in a significant manner deserve to be sued or prosecuted.

Understanding an investment does not guarantee happy results. But sophisticated investors should understand that equity-level risk entails the possibility of underperformance, substantial loss, and even complete loss of the investment. I note that not every investment Princeton has made turned out well. However, we accept responsibility for having made the investment choice.

I feel compelled to digress for a moment and note that there seems to be growing concern that a consequence of the growth of the hedge fund industry will be increased risk that some investors in hedge funds will lose money. I do not believe this is a risk; it is a *certainty* that some investors will suffer significant losses in their hedge fund investments. It is likely that all investors will suffer some amount of loss. But all of this is part and parcel of exposure to "equity-like" risk.

For perspective, it should be noted that when the tech bubble burst, U.S. stock investors collectively lost almost \$7 trillion. Among the losers were sophisticated and unsophisticated investors; endowments, pension funds, and "average Joes." The losses

were suffered through the entire spectrum of relationship formats, including institutional accounts, retail brokerage accounts, mutual funds and hedge funds. The \$7 trillion losses give interesting context to worries about the hedge fund industry, to which total investor exposure is between \$1 and \$2 trillion.

I have described the relatively low levels of leverage incorporated in Princeton's hedge fund program. I know there are other hedge funds that use substantially more leverage. I think it very likely that there are hedge funds that are using imprudent amounts of leverage, and I suspect that investors in such funds will likely have unpleasant experiences at some point in the future. When this happens it will simply confirm that the hedge fund investor was exposed to equity-like risk.

When I think about the important systemic risks facing markets today, aggregate hedge fund leverage is not a major concern. I should offer the disclaimer, though, that I am not much of an expert on macro factors, and I am certainly less of an expert than others testifying today. With that caveat, I should say that I am much more worried about mortgage and federal debt levels than I am about leverage at hedge funds.

The Chair has asked that I comment on the current levels of risk in the markets. It is hard to talk about risk without referring to price. (Any given investment becomes much riskier the more you pay for it.) My sense, supported by conversations with our managers, is that, in broadest brush terms, markets are fully priced. This suggests that investors *ex ante* are receiving below-normal compensation for the risks they are taking. There is a good chance that returns experienced by investors in the aggregate will probably disappoint. However, I have no ability to know whether the likely path to that disappointment will be via sharp downdrafts or through more prolonged periods of mediocre results.

The Chair also asked for comment on the extent to which market practices have improved since the issuance of the CRMPG II report. Here I know that others testifying today are definitely better qualified to answer. I can say that conversations with our managers indicate that over the past two years market practices with respect to OTC derivatives have matured. As one indication, there is much greater discipline in trade documentation than there was in the past.

Finally, I will address the Chair's request that I give my views on the appropriate role of government with regard to hedge funds, their activities in markets, and those who invest in them. The headline is that I believe that the President's Working Group essentially has it right.

I believe that hedge funds make markets more efficient. Markets benefit from having participants that operate with minimal agency constraints.

For hedge funds to avoid becoming institutionalized, *i.e.*, for them to not develop their own agency constraints, their capital sources must be limited to sophisticated investors who are capable of evaluating the quality of the hedge fund manager for themselves.

For quite some time I have felt that the income and net worth tests that are meant to determine the likelihood of sophistication need to be raised. Indeed, I would consider setting even higher thresholds than have been proposed.

Requiring SEC registration would be a feel-good measure that would offer little incremental protection and would risk diverting limited oversight resources. I note that Princeton feels compelled to perform the same exacting due diligence on registered advisors as we do on unregistered ones.

I fear that SEC registration can be misinterpreted as a stamp of approval, akin to a UL seal. It is easy to imagine that mandated registration will actually lead to more confusion as to the inherent risk of a hedge fund.

I have heard concerns that unsophisticated individuals may be getting exposure to hedge funds through their pension funds. Clearly the "average Joe or Jane" is not qualified to assess a hedge fund investment, but presumably there is some professional management of the pension fund who should be sophisticated enough to ask and answer the key question: "Do I understand what I am investing in?" If Congress is concerned that this is not adequate protection, than perhaps ERISA should be amended to restrict pension plans to investing only with registered advisors. Or, the PBGC could base premiums in part on the extent to which a pension fund has investments with unregistered advisors. These would be less invasive measures than requiring all hedge funds to register. I think both of these approaches are flawed and would likely have unintended consequences. I offer them only as potentially "less bad" alternatives.

I think better than any of these approaches for safeguarding would be efforts to assure that there are adequate mechanisms to hold accountable those who have fiduciary responsibility for pension funds, and that sufficient regulatory manpower is devoted to using these mechanisms. Fiduciaries who fail to assure their own adequate understanding of an investment or who put imprudent portions of their portfolios in any individual investment that has the risk of substantial loss should suffer consequences.

With respect to the regulation of hedge fund activity in the markets, I think the PWG again has it right. To assure fair markets and control systemic risk, it makes the most sense and is most efficient to focus regulatory and private oversight bandwidth on the large financial institutions that act as counterparties and lenders. Perhaps we should accept guidance from the bank robber Willy Sutton and direct our activities to "where they keep the money."

Thank you again for this opportunity.